

MANUFACTURING EXTENSION PARTNERSHIP

Success Stories from the Field

Federal Industries

Wisconsin Manufacturing Extension Partnership

Federal Builds Strong Case for Lean Culture

Client Profile:

Federal Industries, a manufacturer of custom commercial bakery and deli display cases, is located in Belleville, Wisconsin. The company employs 160 people.

Situation:

Federal Industries wanted to improve throughput and turned to the Wisconsin Manufacturing Extension Partnership (WMEP), a NIST MEP network affiliate, for Lean techniques to reduce lead times and achieve production-related cost savings.

Solution:

Federal Industries' lead time for their display cases was seven weeks. Their goal was to speed up their process, from receiving the order to shipping the finished product. They began with Value Stream Mapping (VSM), which led to the use of 5S/Visual Workplace on the shop floor to organize the work space. The VSM revealed the organization of the shop: one person assembled a case, from beginning to end. This led to potential delays. In addition, the layout of the shop, long rows of workbenches, meant long walks to get parts up to 2,600 feet per case. To reduce the long walks, half the workbenches were removed, so that each shift shared a bench. This meant that "people had to give up their private workbenches," said Jim Hensch, WMEP manufacturing specialist and portfolio manager for Federal Industries. This represented a cultural shift, since the workers saw their benches as their private space. But the benefits of shared workbenches were obvious, not only fewer steps to get parts, but more room in general. It also became clear that more than one person needed to assemble a case. Priorities needed to be set for what to work on, otherwise the unpredictable flow resulted in part shortages. The need for a Lean Culture and Lean Leadership was apparent.

In general, a company's culture is defined as a pattern of behaviors or problem-solving techniques that have a high probability of use by individual members of the company. A Lean Culture is a specific culture focused entirely on the customer, totally committed to continuous improvement and always seeking perfection. The culture encourages every employee to contribute improvement ideas and be problem solvers. To create a Lean Culture infrastructure, Federal formed a core team, steering team and project teams. Federal's core team consisted of both company and union management, and was responsible for communicating what the company was trying to accomplish, so that goals and expectations were clearly understood.

The steering team, a cross-functional, multi-level team, drives Lean implementation, deciding which areas will be examined and improved and creating project teams. "We had people rotate in and out (of the steering team) so more people would become involved," said Gary Hamburg, Continuous Improvements Director for Federal, "and this helped cultivate ownership of the improvement plan." The project teams then take over and work to make specific changes in processes. To implement the necessary changes, Federal sought volunteers from the shop floor to serve in leadership roles. The volunteers, many from the union, and supervisors received additional development of their leadership

MANUFACTURING EXTENSION PARTNERSHIP

Success Stories from the Field

skills. "People were very, very cooperative," said Hensch. Lean Leadership taught them how to interact with others more effectively and take on a coaching role. This led to a more organized approach in the way employees worked. "Overcoming skepticism is a part of any improvement project, and it can be done using hard data," said Hensch. For example, in the absence of a standardized work process, different shifts will usually accomplish the same tasks using different methods. By videotaping workers from both shifts, then having all workers watch the video, a third process usually emerges, incorporating the best practices of both shifts. "This self-discovery method is part of the Lean Culture change," said Hensch.

Providing appropriate metrics is another key aspect of Lean Culture. The metrics should be important to the company's success and measure something that people can directly affect. By showing what is being accomplished, momentum is created for cultural change. "The more successes we're experiencing, the more we're becoming a Lean Culture," Hamburg said. "Employee empowerment sets Lean culture apart. It helped give everyone ownership of continuous improvement, which helps sustain progress. Federal expects to see future benefits from their new culture, as well. Continuous improvement is ongoing; it's not a program with an end. As we continue to install the culture, it's never-ending. Lean Culture is a very real and crucial element of successful Lean efforts. Lean Culture matters because it not only produces great bottom line results for you but ensures real and sustained progress into the future."

Results:

- * Created a customer-focused Lean culture committed to continuous improvement.
- * Reduced lead time from 7 weeks to 3 weeks.
- * Reduced parts shortages.
- * Saved \$200,000 in costs.
- * Increased sales by \$2 million.
- * Regained sales by \$4 million.

Testimonial:

"Employee empowerment sets Lean Culture apart. WMEP's Lean Culture helped give everyone ownership of continuous improvement, which helps sustain progress."

Gary Hamburg, Continuous Improvements Director